

CLAIMS

1. An information apparatus for managing outputting of content to an output device, the content accessible at least partly by the information apparatus, the information apparatus comprising:
a communication unit to communicate with the output device,
a user interface for interacting with a user;
means for establishing a communication channel between the information apparatus and the output device;
means for receiving over the communication channel one or more components associated with the output device enabling the content to be rendered by the output device;
means for conforming at least part of the content into one or more output images with said one or more components;
means for generating an intermediate output data including said one or more output images and for rendering by the output device; and
means for delivering the intermediate output data to the output device for rendering.

2. An apparatus according to claim 1, for managing outputting of content to an output device selected from a plurality of output devices, wherein the communication unit communicates with said plurality of output devices, and the apparatus includes means to select an output device from said plurality of output devices.

3. The apparatus according to claim 1 in which the one or more components includes one or more of a rasterization vector, a price indicator, an availability indicator, a status indicator, an output data format indicator, and a quality of service indicator.

4. The apparatus according to claim 1 in which the communication channel includes a wireless communication channel.

5. The apparatus according to claim 1 further comprising means for sending payment information over the communication channel as compensation for the rendering of the content by the output device.

6. An information apparatus for managing the outputting of content to an output device, the content accessible at least partly by the information apparatus, the information apparatus comprising:

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a communication unit to communicate with one or more output devices;

a user interface for interacting with a user;

means for obtaining one or more device dependent attributes associated with the output device;

means for conforming at least part of the content into one or more output images with said one or more device dependent attributes, at least part of said one or more output images including mixed raster content encoding;

means for generating an intermediate output data including said one or more output images; and

means for delivering the intermediate output data to the output device for rendering.

7. The apparatus according to claim 6 in which the means for obtaining one or more device dependent attributes includes means for obtaining from one or more sources that includes a user input, a network server, a default value stored in the information apparatus, and from the output device,

8. The apparatus according to claim 6 further comprising means for establishing a wireless communication with one or more output devices.

9. The apparatus according to claim 8 further comprising means for obtaining over the communication channel an output device profile that includes the device dependent attributes.

10. The apparatus according to claim 8 further comprising means for sending payment information over the communication channel as compensation for the rendering of the content by the output device.

11. The apparatus according to claim 6 in which the means for conforming includes means for conforming at least part of the content into at least one output image by one or more of a rasterization operation, a scaling operation, an interpolation operation, and a compression operation.

12. The apparatus according to claim 6 in which the mixed raster content data includes at least a foreground layer.

13. An information apparatus capable of outputting content to an output device; the content accessible at least partly by the information apparatus, the information apparatus comprising:

a communication unit to communicate with an output device;
a user interface for interacting with a user;

means for establishing a communication channel between the information apparatus and the output device with short range wireless communication;

means for conforming at least part of the content into at least one output image with at least one predefined standard rasterization parameter values;

means for generating an intermediate output data including the one or more output image, the intermediate output data being at least partly device independent; and

means for delivering via the established communication channel the intermediate output data to the output device for rendering.

14. The apparatus according to claim 13 wherein the communication unit communicates with a plurality of output devices and the information apparatus includes means for selecting an output device of said plurality to receive the intermediate output data.

15. The apparatus according to claim 13 further comprising means for obtaining over the communication channel an output device profile.

16. The apparatus according to claim 13 further comprising means for obtaining over the communication channel information related to the intermediate output data format.

17. The apparatus according to claim 13 further comprising means for sending payment information over the communication channel as compensation for the rendering of the content by the output device.

18. The apparatus according to claim 13 in which the predefined standard rasterization values is included in the information apparatus.

19. The apparatus according to claim 13 in which the means for conforming includes means for performing one or more of a rasterization operation, a scaling operation, an interpolation operation, and a compression operation.

20. The apparatus according to claim 13 in which the means for conforming conforms at least part of the content into an output image that includes mixed raster content encoding.

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